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# the PINE LAPPET



# The Pine Lappet

*The pine lappet<sup>1</sup> is not known to occur in the United States. It may get in. If it does, and if it becomes established, the pine lappet may cause severe damage to our forest and shade trees. Watch for this insect and for any other insects you do not recognize. Report them promptly so they may be identified, controlled, and possibly eradicated.*

The pine lappet is a serious pest of pine, cedar, and larch trees. Outbreaks occur periodically in Europe. They result in severe defoliation of pine, the insect's primary host.

Serious buildups of the pine lappet take place about every 6 years in Poland. In 1938, on Lussin Island in the northern Adriatic the insect defoliated 60,000 trees. Many thousands of acres in Germany were treated in 1948, 1949, and 1950 for control of this pest. In heavy infestations,

complete destruction of foliage may occur within a few days. Successive defoliations or those followed by drought often kill the trees.

This insect occurs throughout Europe and Asia, and extends into Morocco in Africa. If it were to become established in the United States, it could severely damage our pine, cedar, and larch trees.

## DESCRIPTION OF INSECT

The adult of the pine lappet is a moth. Wingspan of the female is

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<sup>1</sup> *Dendrolimus pini* L.



*Geographic distribution. Red areas indicate parts of the world where the pine lappet occurs.*



*Typical defoliation of pine caused by the pine lappet.*

2½ to 3 ⅓ inches. The male is ½ to 1 inch smaller. Forewings are mostly reddish gray and have a gray, yellow, or red-brown wavy crossband and a crescent-shaped white spot. Hindwings are reddish gray to red brown. The male is generally darker than the female.

Females lay 200 to 300 eggs. Larvae hatch in 1 to 5 weeks and begin feeding on the pine needles. They feed regularly, night and day, until autumn when they hibernate in the ground, under moss. In moderate climates, they hibernate in the trees. Some larvae hibernate during two successive winters and feed during the intervening summer.

The larvae are hairy. They vary in color—black-brown, yellow, gray, or white. Two velvety steel-blue vertical stripes are on the middle of the second and third segments, and

light saddle spots are on the fourth and fifth segments. Black, white, and brown markings occur along the body. Larvae are 1 to 3 ⅓ inches long. They pupate in early summer in spindle-shaped cocoons, which are dirty gray to yellowish brown. The pupal stage usually lasts 20 to 30 days.

## THE PLANT PEST PROBLEM

At least half of our most destructive insects entered the United States from other countries, many before the Plant Quarantine Act of 1912 was passed. Today, thousands of plant pests are intercepted at our borders by plant



*Moth and larva of the pine lappet. Enlarged.*



quarantine inspectors, but some of them still gain entry.

When a new pest is detected, organized efforts are exerted to (1) pinpoint the areas where it has become established, (2) set up a quarantine to prevent spread, and (3) control the pest and eradicate it if possible. The sooner a new pest is detected, the better is the chance of controlling or eradicating it before it does serious damage.

## WHAT YOU CAN DO

Read the description of the pine lappet and its larvae; study the illustrations on the preceding pages. If you should see large numbers of

larvae you have never seen before feeding on pine, cedar, or larch trees, they may be larvae of the pine lappet.

If you find moths or larvae that resemble those described here, or that you do not recognize, send specimens to your nearest agricultural official. The dead moths should be loosely wrapped in soft paper, placed in a small box, and mailed. Mail larvae in a small bottle containing rubbing alcohol. Include a note giving your name and address, date of collection, and locality where the specimens were found and on what tree. Do not send live specimens. If your local agricultural official does not recognize the specimens, he will send them to the proper authorities for identification.



*Prepared by*  
Plant Pest Control Division  
Agricultural Research Service

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